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STUDIES IN STELIS. VI.

BY

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Stelis Lankesteri Ames in Sched. Orch. 3 (1923) 4.

AMONG MIDDLE AMERICAN species of *Stelis*, *Stelis Lankesteri* has the largest flowers, being approached only by *S. leucopogon* Reichb.f. It is characterized by the unequally bilabiate calyx which gives the flowers the aspect of being disepalous. The lateral sepals are coherent to the apex forming a strongly concave lamina; the petals are very fleshy, about 2 mm. long and 2 mm. wide, strongly imbricating behind the fleshy column and conspicuously thickened above the middle. The column is characterized by having the cushion-like stigmatic processes widely separated equalling the anther, with the triangular-lingulate rostellum erect between them. The labellum is about half as long as the petals and in its structure suggests the species of the group to which *S. nubis* Ames belongs.

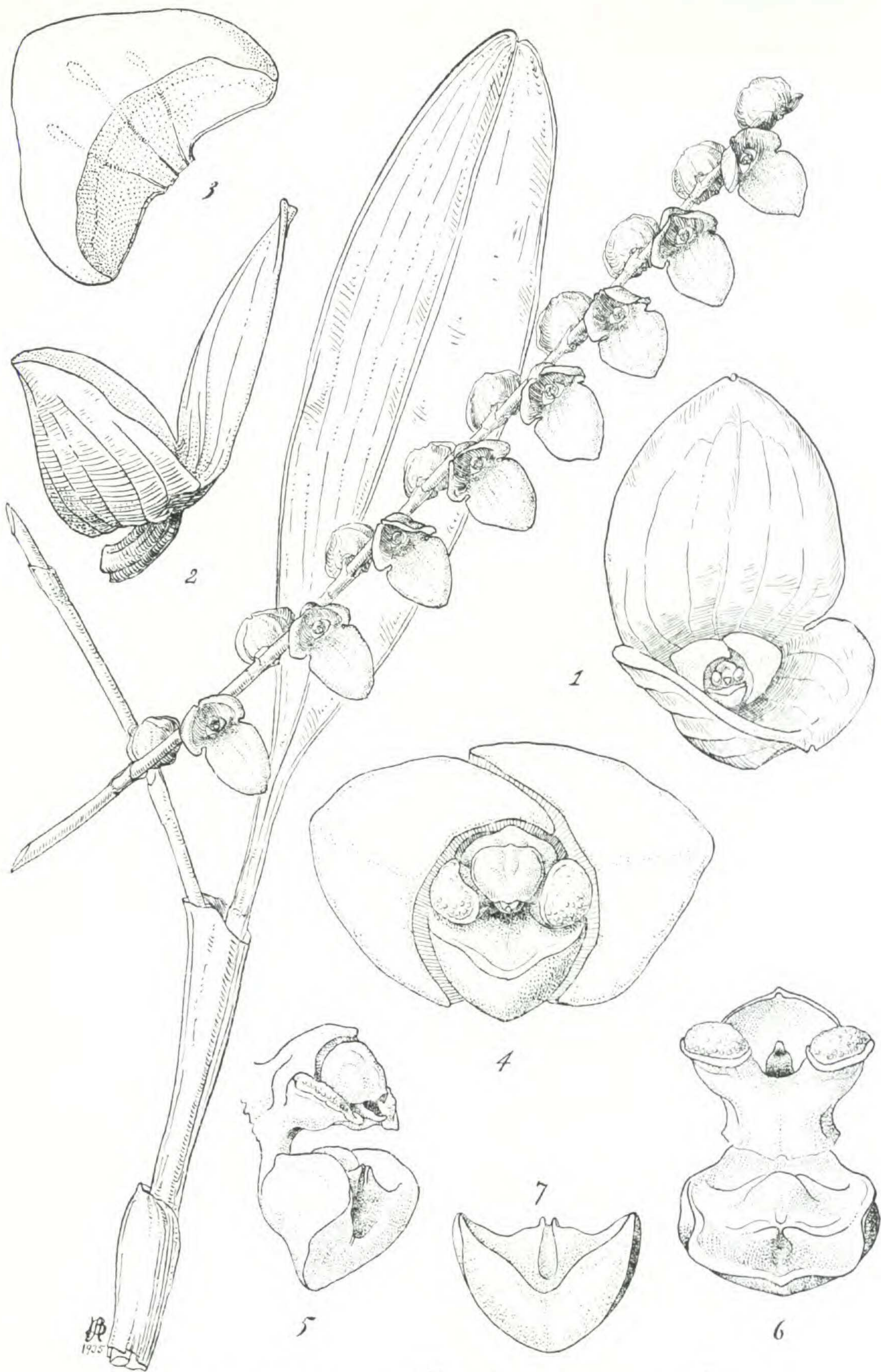
The flowers of *S. Lankesteri* are described by the collector as being vinaceous brown. When dry they are brown-purple.

Only three collections are known to me; that of the type found in the hot forest near La Florida, at an altitude of 150 meters, and two collections from Estrella de Cartago, found at an altitude of 5,000 feet. Because of the great difference in altitude between the type-locality

EXPLANATION OF ILLUSTRATION

STELIS LANKESTERI Ames. Plant natural size drawn from *Lankester 365*. 1, flower much enlarged showing the bilabiate aspect of the sepals and the relatively small petals, labellum and column. 2, a flower much enlarged as seen from the side. 3, a petal much enlarged. 4, petals, labellum and column as seen from above. 5, labellum and column, much enlarged. 6, labellum and column, much enlarged, the anther removed to reveal the rostellar process erect between the cushion-like stigmatic arms of the column. In this drawing the labellum is strongly deflexed. 7, the labellum much enlarged as seen in front view. Flowers and floral parts drawn from material preserved in alcohol.

Drawn in 1935 by BLANCHE AMES



STELIS *Lankesteri* Ames

and Estrella de Cartago, Mr. Lankester was of the opinion that two species might be represented and he emphasized a difference between the flowers: those from the type-locality being without the hyaline area on the sepals that is noticeable in the flowers of the plants from the higher altitude. Structurally the flowers of all the specimens examined are similar. There does not seem to be any specific difference dependent on altitude.

COSTA RICA: La Florida. At 150 meters altitude in hot forest. Flowers vinaceous brown. (Blooming at Cartago under cultivation, October-November 1922). *Lankester 365*: La Estrella de Cartago. At 5,000 feet altitude. Flowers with the upper sepal vinous purple-hyaline. October 4, 1925. *Lankester 1062*; upper sepal semi-translucent maroon, lower sepal with hyaline centre. *Lankester 1017*.